

Book reviews

Transplantation Reviews No. 32. Biology of complement and complement receptors. Ed. by G. Möller. Munksgaard, Copenhagen. 1976. Pp. 167. Price D.Kr 83.35.

Complement was originally discovered during the last century in the course of investigating the mechanism of the lysis of *Vibrio cholera* when injected into the peritoneal cavity of immune guinea-pigs. However, over the last three decades most of the work on complement has been concerned with defining the enzyme activity of its various components. Attention has now returned to the biological aspects of complement and the present collection of reviews on the biological role of complement is very timely.

Several of the articles indicate that the genes that code for some of the complement components, and in particular C2, C3 and perhaps C8, like other functions associated with immunity, map onto the major histocompatibility locus. The C3 allotypes are not MHL linked but may be important in handling virus infections as the distribution of these allotypes differs in normal people and people with recurrent respiratory infections.

McConnell and Lachmann show that factor B of the alternate pathway occurs in the surface of lymphocytes which are probably B lymphocytes. This factor is also linked to the MHL.

Pepys describes the evidence that complement is required for certain T dependent antibody responses while Takahashi and his co-workers describe the interesting phenomenon of the solubilization of immune complexes by complement. There are also reviews of the alternative pathway and of the regulation of complement synthesis. It is interesting that absence of a factor may be a problem of control and not due to loss of a structural gene, and that the level of the C1 inhibitor in angioneurotic oedema can be raised by giving androgens. This review also indicates the use of techniques taken from molecular biology in analysing complement defects. This

particular edition of Transplantation Reviews maintains the reputation of its predecessors in providing detailed topical and important review articles.

G. L. ASHERSON

Edward Jenner's Cowpox Vaccine: The History of a Medical Myth, by Peter Razzel. Caliban Books, Lewes. 1977. Pp. 127 incl. references and index. Price £10.

According to Dr Razzel, Jenner practiced (only half unknowingly) not vaccination but variolation. During the early stages of a person to person passage of cowpox virus, says Razzel, the material collected from pustules distant from the insertion site was not cowpox but smallpox virus. The clinical descriptions given of patients inoculated with this material by several different vaccinators are certainly strongly suggestive of inoculation smallpox although a number of the quoted incubation periods are over long for this syndrome. The suggestion that serial passage of variola virus in human arms attenuated its virulence for man is less acceptable. Passage of a virus in a given host species is more likely to exalt than attenuate its virulence for that host.

The origins of the fairly numerous agents called vaccinia virus have long been a mystery. Dr Razzel rightly says that modern virology cannot resolve the problem. This is not primarily because of the deficiencies of virology but because the early work with strains of unknown provenance was done without adequate scientific controls; the experimental method in biology had not yet been sufficiently refined and the data are inadequate. This very inadequacy makes it unlikely that this interesting little book will lead to a solution of the problem.

The book itself is short and not notably well produced. At £10 it looks grossly overpriced.

C. KAPLAN